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THE ELEMENTARY SCHOOL TEACHER

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CONSOLIDATION AND TRANSPORTATION: A RURAL SCHOOL PROBLEM

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I. ORIGIN AND EXTENT OF THE CONSOLIDATED SYSTEM

It was Massachusetts that led the way in the development of the district system and to her is also due the credit of pointing out the way for consolidation. As early as 1869 Massachusetts passed a law which provided for the transportation of pupils to and from the public schools at public cost. Probably Quincy was the first town in the state to act under the law of 1869, having closed two schools in 1874 and transported the children to other schools. Consolidation was complete in Montague Township, Massachusetts, as early as 1875, and was begun in Concord in 1879. From this time on, consolidation spread rapidly throughout the state until in 1904-5, her expenditure for transportation alone amounted to \$213,221. Other neighboring states have readily adopted the Massachusetts plan until now the movement reaches not only every one of the New England States but extends to the northern, middle, southern, and western states as well, while the question of consolidation is being agitated in every state in the Union. State Superintendent H. A. Ustrud, of South Dakota, reports May 5, 1908, that South Dakota has about fifteen centralized schools. Superintendent Ustrud adds the following: "A number of townships have voted this spring to centralize, so that in a short time we hope to be right along with other states with the plan."

Francis G. Blair, State Superintendent of Public Instruction of Illinois, reports April 22, 1908, that there is but one consolidated school in the state of Illinois that transports the pupils at public expense.¹

Georgia has consolidation to a greater or less extent in more than sixty counties of the state, while in Iowa, more than one-half of the counties of the state report consolidation in one or more townships of the county.

Maine and Vermont expend about one-thirtieth of their school money for transportation alone, while Massachusetts' expenditure of \$213,221 for transportation of pupils is only about 1.18 per cent. of the total expenditure for her public schools.

While consolidation and transportation have made remarkable advancement in many of the eastern states, and particularly in Maine, Vermont, Massachusetts, and Connecticut, perhaps no greater progress or more rapid advancement can be seen anywhere than in Ohio and Indiana.

It was at Kirksville, in Ashtabula County, that the Ohio plan of centralization or consolidation had its origin in 1892. The erection of a new building in one of the districts of Kingsville Township brought up the question whether or no it would be better to abandon the school in that district and take the children to the village school at public expense. In the first case of consolidation in Ohio the schools were centralized at the village school. Finding special legislation necessary in order to consolidate and transport children at public expense, Ohio passed a bill, April 17, 1894, providing for transportation. April 27, 1896, the Ohio legislature passed another bill for the relief of the counties of Stark, Ashtabula, and Portage, and still later a general law was enacted permitting the people of any township at the annual town election to vote "yes" or "no" on the proposition to centralize the schools of that township; i. e., to abandon the small districts and transport the children at public expense to the central school. Under the law of 1904, the board of trustees may abolish all the subdistricts providing conveyance is furnished to one or more central schools for pupils living more than one-half mile from

¹ Due, perhaps, to the large number of township high schools in the state.

the schoolhouse. "Under this section the schools of a township can be centralized without submitting the question to the electors" (State School Commissioner). This law also provides that centralization, once effected, shall not be discontinued within three years, and then only by petition and election. A central graded school must be maintained in centralized townships, and a high-school course of not less than two years is authorized. Transportation must be furnished all pupils living more than three-fourths of a mile from the central building. Such, in brief, is the history of the legislation in Ohio on consolidation of schools and transportation of pupils.

II. CONSOLIDATION AND TRANSPORTATION IN OHIO

Ohio has done much toward solving the rural-school problem. Her rural schools have attracted the attention of many schoolmen of other states and have been made the subject of frequent reports by visitors from all parts of the country. Consolidation has become so widespread in Ohio that at the present time, April, 1908, there are about two hundred townships in which the schools are centralized.

Ohio's first centralized school, the Kingsville school, is a typical example of rural and village consolidation, and perhaps I could do no better than to quote from the *Arena* for July, 1899, concerning the advantages and the satisfaction which it gives to the people of Kingsville Township. This report was made after the school had been in operation eight years and had outgrown the experimental stage, and while this school has made great progress in the nine years since this report was written, yet this same testimony might now be given of many other consolidated schools, not only of Ohio, but of other states both sides of the Mississippi. The quotation is as follows:

The residents of the subdistricts of Kingsville Township which have adopted this plan would deem it a retrogression to go back to the old sub-district plan. It has given the school system of Kingsville an individuality which makes it unique and progressive. Pupils from every part of the township enjoy a graded-school education, whether they live in the most remote corner of the township or at the very doors of the central school. The line between the country-bred and the village-bred youth is blotted out,

They study the same books, are competitors for the same honors and engage in the same sports and pastimes. This mingling of the pupils from the subdistricts and the village has had a deepening and broadening influence on the former without any disadvantage to the latter. With the grading of the school and the larger number of pupils have come teachers of a more highly educated class. Higher branches of study are taught; the teachers are more conversant with the needs of their profession; the salaries are higher; the health of the pupils is safeguarded, because they are not compelled to walk to school in slush, snow, and rain, to sit with damp and perhaps wet feet in ill-ventilated buildings. Nor is there any lounging by the wayside. As the use of indecent language is prohibited in the wagons, all opportunities for quarreling or improper conduct on the way to and from the school are removed. The attendance is larger, and in the subdistricts which have taken advantage of the plan it has increased from 50 to 150 per cent. in some cases; truancy is unknown. It has lengthened the school year for a number of the subdistricts; it has increased the demands for farms in those districts which have adopted the plan, and real estate therein is reported more stable. The drivers act as daily mail carriers. All parts of the townships have been brought into closer touch and sympathy. The cost of maintenance is less than that of the schools under the district plan; the township has had no schoolhouses to build; it has paid less for repair and fuel. Since the schools were consolidated the incidental expenses have decreased from \$800 to \$1,100 per year to from \$400 to \$600 per year. In the first three years following its adoption Kingsville Township actually saved \$1,000.

Green Township presents an example of consolidation distinctly rural. The people of Green Township had watched the school in a neighboring township for two years and had become so thoroughly converted to the new plan that they voted to bond the township for a long term of years to erect a \$6,000 modern and up-to-date school building. This building stands in the center of the township eleven miles from one railroad and six miles from another. The building contains six schoolrooms, with two additional rooms, one of which might be used for a library room and the other for a reception room. It is heated by steam and has a basement under the entire building, part of which might be utilized for laboratories, gymnasium, etc. To this building are brought all the children of the entire township. The enrolment the first year was 180, an increase of thirty over the last year in the scattered schools. Eight wagons are employed in transporting

the children to the central building. The school grounds comprise about three acres, much of which is now used for gardening and elementary agriculture.

III. CONSOLIDATION AND TRANSPORTATION IN INDIANA

Indiana is fast taking the lead among the states, if she has not already taken it, in the matter of consolidation and transportation. The number of schools abandoned has grown from 679, in 1904, to 1,314 in 1908—449 schools being abandoned from September, 1907, to April, 1908. The number of consolidated schools has increased from 280, in 1904, to 418 in 1908, while the number of children transported has increased from 5,356, in 1904, to 16,034, in 1908. The cost per day at the present time, April, 1908, for transportation of pupils in Indiana is \$1,749.24, while the cost per wagon per day is \$1.87. Such has been the progress of the consolidated system in Indiana in the last four years and even greater progress will be made in the immediate future owing to the large number of small, one-teacher schools which still exist in the state and the recent enactment of a law by the last legislature which went into effect April 10, 1907. At the present time there are 387 schools in the state with an attendance of fewer than twelve pupils, and 699 schools with an attendance of fewer than fifteen pupils.

The legislature of 1907 enacted a law making compulsory the abandonment of all schools in which the average daily attendance is twelve or fewer, and gives the trustees the authority to abandon all schools where the attendance is fifteen or fewer; provided, the conditions as to roads, streams and bridges permit of such discontinuance. The law provides further that

it shall be the duty of the township trustee to provide for the education of such pupils as are affected by such or any former discontinuance in other schools, and they shall provide and maintain means of transportation for all such pupils as live at a greater distance than two miles, and for all pupils between the ages of six (6) and twelve (12) that live less than two miles and more than one mile from the schools to which they may be transferred as a result of such discontinuance. Such transportation shall be in comfortable and safe conveyances. The drivers of such conveyances shall furnish the teams therefor and shall use every care for

the safety of the children under their charge, and shall maintain discipline in such conveyances. Restrictions as to the use of public highways shall not apply to such conveyances. The expenses incident to carrying into effect the provisions of this act shall be paid from the public school funds.

E. C. Crider, County Superintendent of Tippecanoe County, submits the following statistical report showing centralization from 1899 to 1906.

Townships	Schools Abandoned	Additional Teachers	Number of Hacks	Number of Pupils Conveyed
Lauramie.....	10	7	9	197
Randolph.....	5	4	5	90
Jackson.....	2	0	1	8
Wayne.....	3	1	2	44
Union.....	1	0	0	...
Wea.....	7	3	6	100
Sheffield.....	2	1	1	12
Perry.....	4	3	3	48
Washington.....	7	2	5	76
Tippecanoe.....	2	1	1	9
Wabash.....	3	0	2	26
Shelby.....	6	2	1	10
Fairfield.....	2	0	0	...
Total.....	54	24	36	620

NOTE.—Of the additional teachers two were for rural schools, eight were for high schools, fourteen were needed because of centralization. Length of transportation routes, from $2\frac{1}{2}$ to 7 miles. Cost per day for hacks, from \$1.00 to \$2.50. Total daily cost of service, \$63.75. Number of children per hack, from 8 to 27. Total number of pupils conveyed in the county, 623. All drivers but six provide their own hacks.

Mr. Crider reports that many of the rural schools of Tippecanoe County were so small that they could hardly be designated as schools. Animation and life were lacking. Very often there was but one pupil in a grade, so there were no companionship and competition in the work. The inexperienced teacher was often present. One school had not had an experienced teacher in ten years. Of the 123 rural schools of the county, fifty-four have been abandoned. As a rule, the idea of centralization has generally been well accepted. There are sometimes some objections made to the details in carrying out the plan but the idea has been seldom opposed. The principal complaint concerning transportation is in regard to the hack, the driver, the length of time

on the road. A frequent complaint is that children have to start too early.

In contrasting the new plan with the old, and after several years' experience in Tippecanoe County, Mr. Crider says: "The complaints about consolidation, as I see it, are not more numerous nor as serious as the complaints made about poor work and inexperienced teachers under the old plan. The greatest proof that centralization gives general satisfaction is that these fifty-four schools are not missed."

In 1899 there were 164 township teachers in Tippecanoe County. In 1906 there were 133 with nearly one-half the schools of the county abandoned.

In Wea Township six wagons, each heated by a stove and made comfortable, are used to convey the one hundred pupils to a modern, central building heated by a furnace and provided with all the necessary appliances of a well-equipped city school. A well-selected library of nearly one thousand volumes is one of the great advantages of this school. The trustees have built a barn large enough for ten horses and buggies for the high-school pupils who drive. One teacher who can do high-grade music work is employed to give instruction to all the pupils of the school.

Lauramie Township employs nine wagons whose drivers are carefully selected and their routes carefully laid out. One feature of their contract should be generally adopted:—every driver whose route crosses a railroad is required to get out of the hack and lead the team across the track, thus avoiding all chance of being run down by a train.

Shelby Township, after four years of experience with consolidation, makes the following report: (*a*) It has made it possible to increase the length of the term from $6\frac{1}{2}$ months to $7\frac{1}{2}$ months. (*b*) Schools made better. Pupils placed in larger classes, which permitted a fuller discussion of the lesson. It gave them a chance to measure themselves with others. (*c*) Interest raised in the school. Parents quick to realize the advantages and are anxious to keep their children in the high school. (*d*) The building, one of the finest in the county, has a large assembly room for lectures, public meetings, etc. (*e*) High school of four years. Graduates

receive credit for work done in the high school in nearly every college and university in the state.

Mr. S. D. Symmes, trustee of Union Township, Montgomery County, says: "The success of the consolidated school is in getting the children to and from school in the most approved way and in the shortest time. Our drivers are men of good reputation and are paid good wages. Each route is run on schedule time, so that the children know to the minute when the wagon



TRANSPORTATION WAGON, DELPHI WAGON WORKS

will arrive, and thus they can be ready to go. Drivers are not expected to wait over two minutes for children to get ready. They carry a book which shows the time they arrive at every home. Routes are from four to six miles in length and can be made in an hour and a half. The wagons are made specially for the conveyance of pupils, having a door and steps at the back, a door on the side for the driver, a window in front, roll side curtains, and are provided with foot warmers, lap robes, etc.

Lima, Lagrange County, a village of about six hundred population, gives the following interesting account of her experience with consolidation: Seventy per cent. of the children are from the country. Town and school centrally located. Length of

school term is nine months. There are nine years of grade work and four years in the high school. There are 160 pupils in the grades and 90 in the high school, with a total enumeration of 269. This was the first township high school in the state to be commissioned by the State Board of Education. It is placed on the accredited list of the North Central Association. It employs a special teacher of music and there are two pianos in the high school and an organ in each grade room. The high school maintains choruses and orchestra, and a glee club. There is a school hall with a raised floor and an equipped stage. A \$400 lecture course is sustained. The school is provided with a library and reading room with one thousand volumes and a paid librarian; a laboratory well equipped for scientific investigation; a school garden of two hundred plats for the study of agriculture throughout the grades and high school; a free kindergarten and an athletic field; a five-acre playground and a separate building for gymnasium, well equipped.

There are four teachers in the high school—all college graduates, and five professionally trained teachers in the grades. The high-school course of study includes four years each of English, Science, Music, and Latin; three years each in mathematics, history, and German; common branch "review," household science, bookkeeping, public speaking and agriculture.

The following show conditions in the centralized school of Lima township:

Number of days in session	180
Number enrolled in the school	250
Number enrolled in the grades	160
Number enrolled in the high school	90
Average per cent. of attendance	96
Number of teachers	10
Total school enumeration	269
Total number of foreign pupils	40
Total expenditures for school purposes	\$7,159.60

One of the most remarkable schools in Indiana is located at Graysville, a small village in Sullivan County. This school is of unusual interest as a rural school from the point of view of the large amount of industrial work which is being done through-

out all its departments. Friday afternoon is given up to industrial work in all the departments of the school. The rest that is accomplished in the industrial line is all done outside of school hours—at noons and recesses, after school hours at night and on Saturdays.

Some of the things that are being attempted are sewing and stitching, basket weaving, venetian iron, pounding brass and copper, book-binding, rug-weaving and leather-tooling for the



CONSOLIDATED GRADED SCHOOL BUILDING, UNION TOWNSHIP, JOHNSON COUNTY

girls; cabinet-work, carpenter-work, cement-laying, venetian iron, pounding brass and copper, wood-carving, setting type and printing, leather-tooling and book-binding for the boys. There are tools for doing all this work in the school, some owned by the township, some owned by the principal, and some by the pupils. Immediately adjoining the school-yard is a two-story building which has been fitted up for a workroom for the boys, and here, at noon and recesses, at night and on Saturdays, some twenty boys are busy. Some of this work is done for the township in the way of cement walks around the schoolhouse, building of outhouses, making bookcases, etc. The industrial work is correlated with

the textbook work in the various subjects in a way that not only gives a larger and richer meaning to these subjects but also an added value to every production in the shop.

These are some of the advantages which the great state of Indiana, great at least in an educational way, furnishes to more than a quarter of a million country boys and girls.

From the large number of reports from all parts of the country, from state superintendents of public instruction, from county superintendents, from principals of consolidated schools, from the parents and from the children themselves, wherever consolidation has been tried, can be gleaned this common and almost unanimous sentiment which can be summed up under three heads. First, better health, less exposure in going to and returning from school, better heat, better light, better ventilation, and better sanitary conditions. Second, better education: morally, socially, and intellectually. Third, greater economy of money, time, and effort.

Perhaps the best proof of the universal satisfaction with which consolidation meets, is the fact that so few schools ever return to the old plan, no matter how little or how great the cost to make the experiment. From the large number of reports examined, there was found but one school out of the several hundred that have tried the new plan that has gone back to the small, one-teacher school and that was because of an accident in transportation and before the new plan had been given a fair trial.

IV. ADVANTAGES OF CONSOLIDATION

To sum up, then, the many advantages which the system of consolidation and transportation offers:

1. Consolidation provides for better and more modern school buildings: better lighted, better heated, better ventilated, with better sanitary conditions; all of which tend to improve and promote the health interests of the school and of the community.

2. Consolidation is more economical than the many small schools. Under the consolidated system, the cost is less for repairs, fuel, apparatus, etc. Consolidation lessens the expense and equalizes, more nearly, the cost.

3. Consolidation provides for better teachers and, because of

the more favorable social conditions which exist among them, they have greater enthusiasm and interest in their work. Teachers are engaged for a longer term and are paid better salaries, enabling the trustees to secure teachers who have had a normal school, college, or university training. Trained and experienced teachers for special subjects, such as music, drawing, agriculture, nature study, etc., are secured.

4. Closer and better supervision is made possible by consolidation. There are fewer schools for the county superintendent to supervise and much of the time spent in traveling the many miles necessary to reach a hundred or more small schools can be utilized to better advantage. Then, too, wherever the consolidated school has taken the place of a half-dozen or more small schools, there is an added advantage in having a principal at its head, who is competent to manage and supervise the educational and disciplinary affairs of the school.

5. Under consolidation there are fewer and better school officers; there are less politics and less favoritism and, hence, better school conditions.

6. Under consolidation there is a longer term of school than many of the small schools now have, and at less cost.

7. The consolidated system provides for a greater variety of studies, including manual training, domestic science, agriculture, music, gymnastics, etc., hence a greater incentive to boys and girls to continue in school long enough to finish the high-school course.

8. Consolidation engenders that healthy educational spirit which can only come with the association of numbers. It provides for larger classes from which teachers are able to secure the interest and healthy rivalry which does not arise in the small district school. Parents take greater interest in the educational affairs of the community.

9. Consolidation tends toward a more healthy social spirit in the school and in the community; rural and village children mingle together upon a common plain, the one securing much from the other. Parents and teachers become better acquainted with each other through frequent social gatherings at the common

meeting-place—the schoolhouse. Home and school are brought into closer relation to each other.

10. Under consolidation a better system of grading pupils, together with departmental teaching, is made possible. The teacher is no longer required to instruct in all the common branches pupils of all ages, but only in those subjects which she is especially prepared to teach. With better grading the teacher



PREPARING A LESSON IN AGRICULTURE, GRAYSVILLE HIGH SCHOOL

has fewer and longer periods of recitation and is able to give her pupils more individual attention.

11. With consolidation come better roads, giving the farmer the best facilities for transportation and thereby increasing the valuation of the farm.²

12. Consolidation has made possible the solution of the problem of agricultural education, and it is the only complete solution that has been offered.

13. Consolidation is the only plan tried or proposed by which

² Once when a man wished to sell his farm he advertised, "A school near." Now he advertises, "Children conveyed to good schools." "Good graveled roads all the way to town."

the country child can secure such an education as modern conditions demand, and such as is already afforded the city child.

14. Through consolidation, country boys and girls are furnished a good education from the kindergarten through the high school without disturbing the home either by separation of members of the family or by "moving to town to educate the children."

15. Consolidation provides for a paid janitor, who is able to keep the school building and grounds in a neat, attractive, and sanitary condition.

16. Consolidation also provides for better supervision and better discipline in the building and on the playground at noon and recess.

17. Athletics is one of the factors in the solution of the problem of "how to keep boys in school" and consolidation furnishes even better advantages for athletics than the city school.

18. Consolidation is one of the means of solving the problem of "compulsory education" and under it there is practically no need of a truant officer.

20. Consolidation brightens and broadens country life and rationalizes the movement toward population centers.

V. ADVANTAGES OF TRANSPORTATION

Some of the advantages of transportation of pupils.

1. Under transportation there is far better attendance. No tardiness.

2. Transportation tends to the formation of habits of punctuality not only on the part of the pupils but on the part of the parents in getting their children ready for the hack on time.

3. Through transportation, pupils are provided with warm, comfortable conveyances instead of having to walk through rain, slush, and snow and then sit through the day with wet feet and clothing.

4. In transportation there is no opportunity for loitering by the wayside or fighting on the road to and from school. Vulgar and indecent language, which was frequently used in the presence of the larger girls and the small children when returning from the small school, is now turned to conversation concerning the social

welfare or the work of the school as suggested by the driver or by some of the older pupils.

5. The many trolley lines throughout Ohio and Indiana with half-fare to schools, puts the consolidated school within easy reach of many school children of these states.

VI. SOME OBJECTIONS TO THE CONSOLIDATED SYSTEM

1. Perhaps the chief objection is in the abandonment of the old district school and the erection of a new central building. This objection is anchored partly to tradition, but is more largely a question of expense in the way of increased taxation for a modern school building.

2. Another objection which is frequently raised is that consolidation tends to decrease the value of farm property by abandoning the nearby school. As a matter of fact, reports generally show that by consolidation the value of farms has increased through good roads, better school conditions, and a more united educational and social sentiment throughout the whole community.

3. Some parents object to consolidation on the ground that they are obliged to get their children ready for school much earlier than when they walked to the nearby school, and that they are too long on the road in going to and returning from the central school. While this objection is well grounded, it might be questioned whether even the pupils who live farthest from the central school are on the road longer when conveyed than when they walked from school.

4. Again, parents of young children frequently complain of the little ones being so far from home for so long a time. Every true mother has experienced a feeling of lonesomeness when the little one entered the school, and especially where the school was a small, dilapidated country school, and where the teacher had little or no leisure time to give the little folk. But in the modern consolidated school building, with bright, cheerful, well-equipped kindergarten, rest, and playrooms in charge of an experienced and well-trained kindergarten teacher who has learned to take the place of the kindest of mothers, with telephone lines from the

school to every home by which parents can keep in communication with the teacher, mothers have little to fear.

5. Some parents object to having their children eat cold dinners at school on the ground that it is not healthy. This, too, is a valid objection; but why not provide a kitchen and lunch-room in every consolidated building where children can get a warm lunch and have a clean and respectable place to eat it? This is being done in many of the city schools. Why not in the consolidated school, where there is even a better opportunity than in most city schools. Every consolidated school, with four teachers or more, should have a course of training in domestic science, and the well-managed, well-equipped lunch-room will furnish a part of such a course.

6. As the success of consolidation depends largely upon the facility of transportation, it is perfectly evident that not all states and sections of the country present as favorable conditions for the carrying out of the plan as do Ohio and Indiana. The climate and topography of the country, the density of population, the wealth interests of the community—all these are determining factors in the solution of this great problem; yet country people everywhere are at last beginning to see that while they pay more for elementary instruction alone than city schools cost, including the high-school course, their schools are far behind the city schools in instruction, supervision, and in the character of buildings. These people are beginning to realize more keenly than ever before the need of better educational advantages and they are determined to have them through the one solution of the problem—that of consolidation; and when the consolidated school has all the advantages of the city school in addition to those which the country already affords, it will then be the best in the land.

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